(a) whether it is a fact that a study conducted by World Bank in 1991-92 showed that 7500 people died due to air pollution in Delhi alone;

(b) if so, the details thereof;

(c) whether it is also a fact that air pollution deaths in Delhi had increased to 10,000 in 1995 when a study was conducted by the Centre for Science and Environment; and

(d) if so, what action has been taken by Government in this context during the last five years?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI BABULAL MARANDI): (a) and (b) Yes, Sir. The World Bank Report states that urban air pollution is deteriorating due to upward trends in power consumption, industrialation, personalised vehicles and refuse burning. The health effects, such as increased premature deaths and respiratory diseases, were estimated by a model and were as a result of a combination of factors such as air pollution, lower standard of living and nutrition. According to the study, 7401 people died prematurely in 1991-92.

(c) The Centre for Science and Environment has applied the same epidemiological model of the World Bank study to calculate the trend of mortality and morbidity due to air pollution in Delhi and other major cities. The study has revealed that the number of premature deaths in Delhi had increased to 9859 by 1995.

(d) A number of steps have been taken to prevent and control air pollution in Delhi and other cities. These include control of vehicular pollution through progressive tightening of emission norms for vehicles at the manufacturing stage ot bring in better technology vehicles which are fuel efficient and less polluting, introduction of cleaner automotive fuels such as low-sulphur diesel and unleaded petrol and control of pollution from in-use vehicles through a system of regular pollution check and improved road network and traffic management. Control of industrial air pollution includes, interalia,—notification of ambient air quality standards as also emission standards for the major categories of polluting industries. The Central Government lays down guidelines for siting of industries and major projects and provides for financial assistance for construction/augmentation of pollution control systems in industries and thermal power plants. A comprehensive Action Plan to control pollution in Delhi was prepared in November, 1997. The Environment Pollution (Prevention and Control) Authority for the National Capital Region has been constituted on 29 January, 1998 for protecting and improving the quality of the environment and controlling pollution.

चिड़ियाघरों में जानवरों की स्थिति

3389. **श्री जनेश्वर मिश्र:** क्या पर्यावरण और वन मंत्री यह बताने की कृपा करेंगे कि:

(क) क्या यह सच है कि देश के अधिकतर चिड़ियाघरों में जानवरों की स्थिति दयनीय है; और

(ख) यदि हां, तो इन चिड़ियाघरों की स्थिति सुधारने के लिए क्या कार्यवाही की गई है?

पर्यावरण और वन मंत्रालय में राज्य मंत्री (श्री बाबूलाल मरांडी): (क) जी, हां। देश के अधिकतर प्राणी उद्यानों में जानवरों की वास-व्यवस्था एवं स्वास्थ्य संबंधी उपयुक्त सुविधाएं नहीं है।

(ख) केन्द्र सरकार ने जानवरों की वास-व्यवस्था तथा स्वास्थ्य सबंधी सुविधाओं के लिए वन्यजीव (संरक्षण) अधिनियम 1972 के प्रावधानों के तहत न्यूनतम मानक निर्धारित किए हैं। उक्त अधिनियम में यह भी प्रावधान है कि केन्द्रीय चिड़ियाघर प्राधिकरण की मान्यता के बिना देश में किसी भी चिड़ियाघर का संचालन नहीं किया जा सकता। चिड़ियाघर को मान्यता, संरक्षण के महत्व तथा निर्धारित मानकों पर चिड़ियाघर के खरा उतरने की संभावना को ध्यान में रखकर दी जाती है। मान्यता प्राप्त चिड़ियाघरों से, एक निश्चित समयावधि के भीतर अपेक्षित मानकों पर खरा उतरने की अपेक्षा की जाती है। इस उद्देश्य के लिए तकनीकी तथा वित्तीय

सहायता भी प्रदान की जाती है। प्रशिक्षण तथा कार्यशालाओं के माध्यम से चिड़ियाघर के कर्मचारियों की व्यावसायिक निपुणता को बढ़ाया जाता है। चिड़ियाघर प्रबंधन से संबंधित विभिन्न आयामों में निपुणता वाले संस्थानों को भी इस तरह के कार्यक्रमों से जोड़ा जाता है।

Deaths due to Environmental Pollution in Major Cities

3390. SHRI KRISHNA KUMAR BIRLA: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether the Centre for Science and Environment has, in its recent study, revealed alarming number of deaths due to environmental pollution in major cities in the country;

(b) if so, the details thereof stating the overall annual percentage or rise in the environmental pollution and the comparative rise in the number of deaths during the last two years; and

(c) what strategy is formulated by Government in furtherance of its measures to control the atmospheric poisoning taking heavy toll of life annually.

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI BABULAL MARANDI): (a) and (b) An article published by the Centre for Science & Environment (CSE), a non-governmental organisation, estimated that nearly 52,000 premature deaths in 36 Indian cities have occurred in 1995 due to air pollution. The estimation, however, is not based on actual figures and there is no conclusive scientific data to confirm these figures. NO conclusive evidence on the incidence of ailments due to environmental pollution could be inferred.

(c) The steps taken by the Government to reduce environmental pollution include the following:—

(1) The Government has formulated a comprehensive Policy Statement fo Abatement of Pollution which envisages integration of environmental and economic aspects of development planning, lays stress on preventive aspects of pollution, promotion of cleaner technologies to reduce pollution and health related aspects;

(2) Fiscal incentives are provided for installation of pollution control equipment and also for the shifting of industries from congested areas;

(3) Low lead petrol had been introduced in the four metro cities of Delhi, Mumbai, Calcutta and Chennai w.e.f. June 1994. Subsequently, unleaded petrol and catalytic converter fitted vehicles were introduced in the above mentioned 4 cities with effect from 1.4.1995;

(4) The Government is implementing a major plan of action for introduction of unleaded petrol and catalytic converter fitted vehicles and introduction of low sulphur diesel for cleaner diesel vehicles in a phased manner. Fuel quality standards for petrol and diesel have been notified.

(5) Gross emission standards for on-road vehicles and mass emission standards for all categories of new vehicles have been notified under the Central Motor Vehicles Rules, 1989 and are being enforced by the Departments of Transport of the various States.

(6) For control of pollution from vehicles, emission norms for both petrol and diesel driven vehicles at the manufacturing stage were introduced for the first time in 1990 and made tighter in 1996. More stringent emission norms have also been notified and will come into effect from 1.4.2000.

(7) Surveys have been conducted by the Central Pollution Control